SPECIAL REPORT 8

FOREST INSECT CONDITIONS

CUYAMACA STATE PARK

JANUARY 1953

APPRAISAL SURVEY

INTRODUCTION

On January 29 and 30, Cuyamaca State Park was inspected for insect loss on a scouting basis by Boyd Wickman and Paul Bourgeois of the Forest Insect Laboratory. All timbered regions of the Park were visited except the area within the Conejos Burn of 1950. Mr. Allison, Assistant Park Ranger who was contacted on January 29, expressed considerable interest in the status of insect conditions in the Park. However, he stated that the present State Park policy was to avoid cutting even dead trees, so he could foresee no insect control activities being undertaken at this time. The State Division of Forestry had carried on fell-peel-burn insect control in 1948 and 1949 with a $10,000-a-year budget, but in the spring of 1949, through poor fire control, some green timber was destroyed and this has seemed to result in an unfavorable outlook among local Park personnel on insect control programs.

Insect and Host Species

Several insect species are actively destroying timber in the Park. Large groups of ponderosa and Coulter pine are being killed by the western pine beetle, Dendroctonus brevicomis Lec. and some top killing of ponderosa and Coulter pine, caused by the California five-spined pine engraver beetle, Ips confusus (Lec.) was evident.

In addition to this, a great number of true firs are being attacked by fir engraver beetles, Scolytus spp. However, no effective control method is available for these species, so it is merely included in the area description of insect conditions.

Status and Scope of Infestation

A survey from fire roads was initiated on the northern boundary of the Park and proceeded south, with a tree-by-tree check and count of all large group kills. The areas can be divided into a group with normal or endemic loss and one area which has loss in epidemic proportions.

The first group would include Middle Peak, the northern edge of the Conejos Burn (which has heavy white fir loss caused by fir engraver beetles, Scolytus spp., the slope above Cuyamaca Guard Station and campground (heavy fir loss

again noted), Stonewall Peak - West Mesa, Green Valley, and East Mesa. In all these areas, scattered loss in Coulter pine and ponderosa pine caused by the western pine beetle was noted along the perimeter of the Burn.

The critical area was the southeast slope of Cuyamaca Peak on the edge of the Conejos Burn. Here, large groups of ponderosa pine and Coulter pine are being killed by the western pine beetle, covering at this time, a strip 1-1/2 miles long and 1/2-mile deep, steadily progressing into green timber.

A count was made of the pine loss in this area as follows:

Number of Trees	Trees/Acre	Remarks
887	1.8	Abandoned by western pine beetle in 1952.
330	.7	Currently infested by western pine beetle.
76	.2	Currently top-killed by Ips spp.

DISCUSSION

The Park as a whole appeared to have only scattered endemic loss; however, the one outbreak of epidemic proportions occurs in a critical area on the southeast slope of Cuyamaca Peak. It is believed that this is the worst single infestation in the State, at the present time. This loss was, no doubt, initiated by the effects of the Conejos fire of 1950 and now, after 2 years of unrestricted build-up, has developed into a serious threat to all surrounding timber. Because of the high recreational value of the Park, and the fact that so much timber has already been destroyed by the Conejos fire, it seems logical to make every effort to protect the remaining timber resources. Protection from fire only is not the answer. Insect control must be included in the protection program.

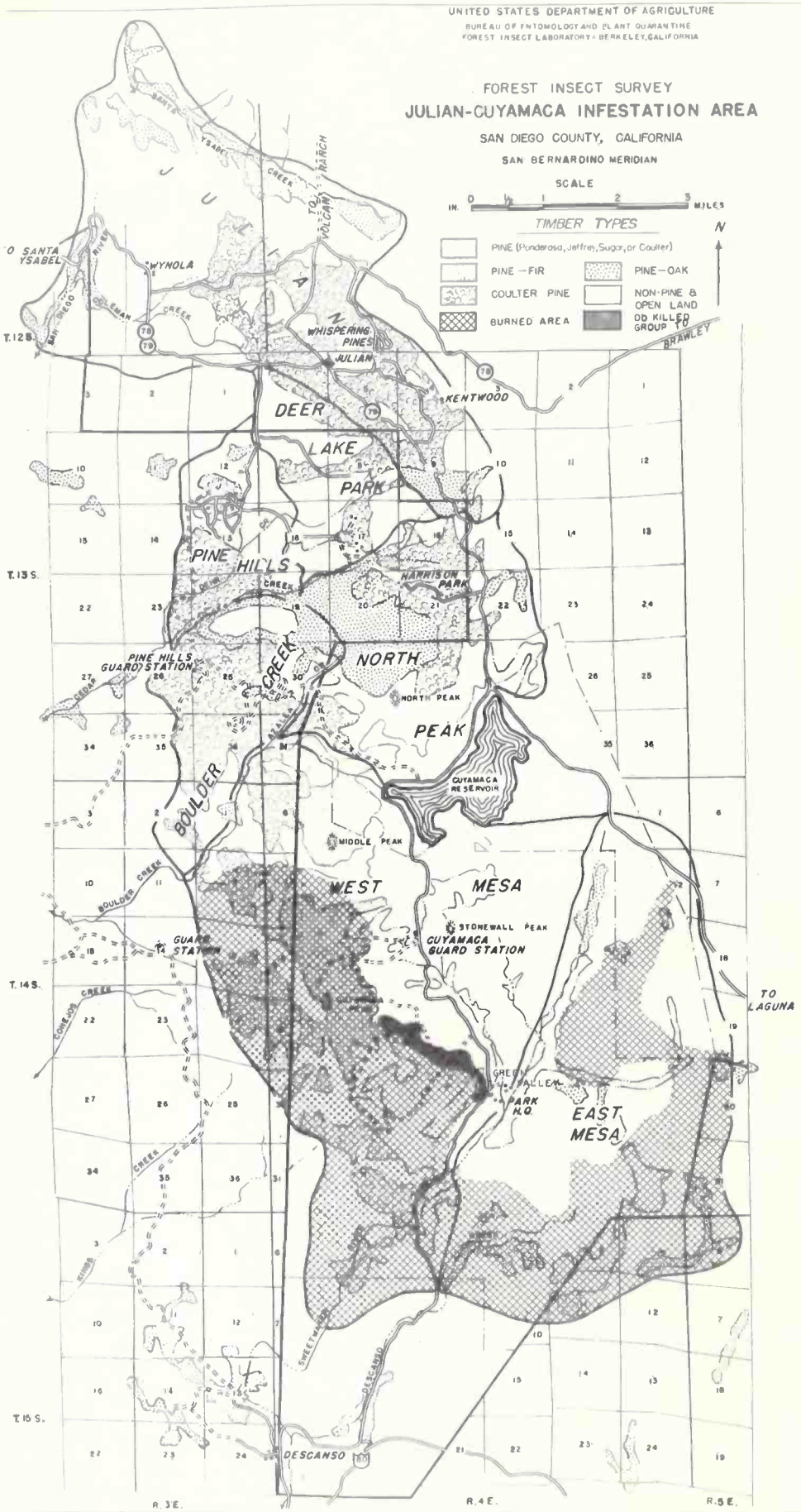
RECOMMENDATIONS

In view of the heavy concentration of loss by the western pine beetle in ponderosa and Coulter pine on the southeast slope of Cuyamaca Peak, direct control is recommended for this area. The control methods used may be to either fell-peel-burn, or spray felled trees with orthodichlorobenzene in diesel oil. In order to be effective, the work should be done prior to beetle emergence or not later than April 15, 1953.

Forest Insect Laboratory
Berkeley, California
February 20, 1953

SUBMITTED BY:

Boyd Wickman
Field Aid


UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
FOREST INSECT LABORATORY - BERKELEY, CALIFORNIA
FOREST INSECT SURVEY
JULIAN-CUYAMACA INFESTATION AREA
SAN DIEGO COUNTY, CALIFORNIA
SAN BERNARDINO MERIDIAN
SCALE
IN. 0 1/2 1 2 3 MILES
TIMBER TYPES
N
PINE (Ponderosa, Jeffrey, Sugar, or Coulter)
PINE — FIR
PINE — OAK
COULTER PINE
NON-PINE & OPEN LAND
BURNED AREA
DD KILLED GROUP
SANTA YSABEL
TO VOLCAN RANCH
SANTA YSABEL CREEK
SAN DIEGO RIVER
WYNOLA
CO. ROAD
CREEK
WHISPERING PINES
JULIAN
KENTWOOD
TO BRAWLEY
DEER
LAKE
PARK
PINE HILLS
CREEK
HARRISON PARK
NORTH
PEAK
PINE HILLS GUARD STATION
CEDAR
CREEK
NORTH PEAK
BOULDER
CUYAMACA RESERVOIR
MIDDLE PEAK
WEST
MESA
BOULDER CREEK
GUARD STATION
STONEWALL PEAK
CUYAMACA GUARD STATION
TO LAGUNA
CONEJOS CREEK
GREEN VALLEY
PARK H.Q.
EAST MESA
SWEETWATER
DESCANSO
T. 12 S.
T. 13 S.
T. 14 S.
T. 15 S.
R. 3 E.
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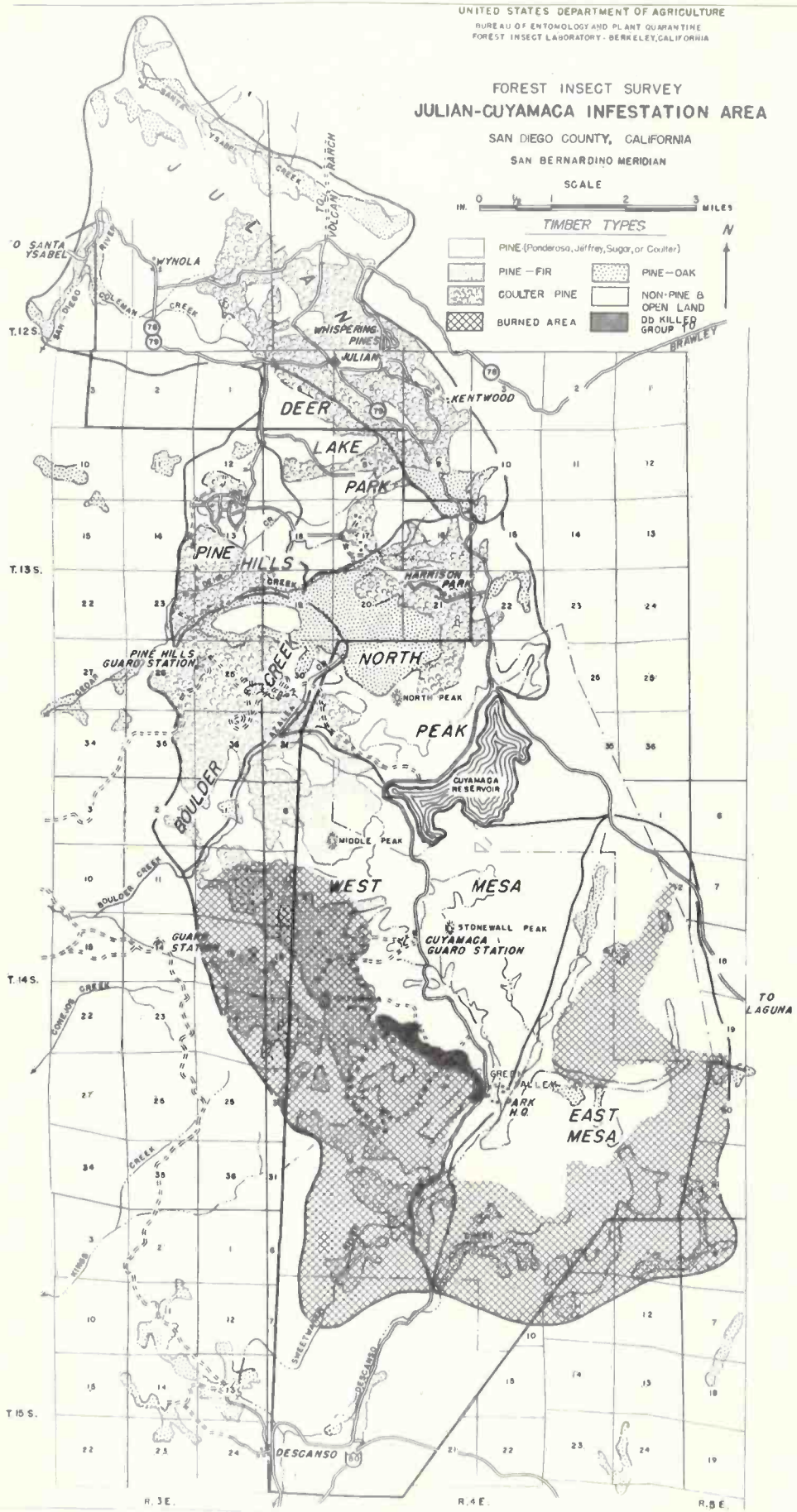
R. 5 E.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